Case Studies 2022L

Paper writing practices

May 22, 2022

Expectation for final projects

1. **Presentation:** Pre-recorded video (~ 5 mins)

2. **Report:** in the LaTeX format consisting the following items:
   - Abstract
   - Introduction
   - Method
   - Results
   - Conclusion

Expectation for final projects

General aims in the projects:

- Training different ML models for your task (base + 4 models)

- Explanation of the best performing model by using local and global level XAI tools

- Comparison of model behaviors in terms of XAI tools to see the difference between them

- Discuss the data-related problems in terms of XAI tools

Why paper?

- Documentation of your research

- Sharing your findings

- Reporting the results of your experiments

- …

Structure of a paper

Abstract

Keywords

1. Introduction

2. Methodology

3. Results

4. Discussion and conclusions

References

Appendix*

Supplemental materials*

* optional

Abstract (100-200 words)

What to focus on to achieve the purpose of an abstract in research paper:

- What your research is about

- What methods have been used

- What you found

The abstract section of a research paper is **the selling pitch of your article**. This is where researchers can get a quick insight and decide whether to read. It's worth spending time to write an abstract that will win readers over.

Abstract (100-200 words)

Tips:

1. Make sure that your abstract is self-contained, without abbreviations, footnotes, or incomplete references.

2. It should be a concise summary that makes sense on its own.

3. Include keywords throughout, but make sure the writing still flows naturally.

4. You should also avoid including any images, background information or technical terms that may not be understood without further explanation.

5. You should describe your method and procedures.

Keywords (3-5)

Selecting the right keywords is how to start a good title and abstract, as well as **helping the right readers find your article online**.

>>> Think of them as the labels for your article.

Tips:

1. Read through your paper and highlight any key terms or phrases that are most relevant to the focus of your work.

2. Draw up a shortlist.

3. Try searching with your keywords to make sure the results fit with your article and so you can see how useful they would be to others.

4. Narrow down your keywords to make sure they are as accurate as possible.

5. Review your final list and ask yourself, will these keywords be most effective at indexing my article online?

Introduction

Your introduction should provides:

- The background information needed to understand your study,

- The reasons why you conducted your experiments.

- At the end of your introduction you should include a clear statement of your aims and a brief sentence or two on how you conducted your study.

- Although your introduction comes first in your article, you'll have a clearer idea of how to write it once you've written the rest of your paper.

- Typically, a literature review should discuss what's already known about the topic of the article, identify gaps in current knowledge and present your approach to addressing those gaps.

Methodology

The method section gives the reader all the details of how you conducted your research.

Results

- You're answering the question '**what have you found?**'

- You should state your findings, but don't interpret the results or discuss their implications in this section.

Discussion and conclusions

- Your discussion and conclusion are where you interpret your results.

- Discuss your conclusions in order of most to least important, and end by stating your main conclusions again.

Is there any missing?

Title

Good writing titles should be concise, accurate, and informative, and it should tell the reader exactly what the article is about.

This is where the keywords you've identified come in. It's vital to incorporate your most relevant keywords in your title to make your article more discoverable in online searches. The title should include 1-2 keywords.

A good title for research paper should:

- Incorporate the keywords, so that the article is more likely to be included in the results for relevant online searches.
- Be understandable to a reader from outside its field.
- Avoid abbreviations, formulae, and numbers.
- Keep away from using "Investigation of…"; "Study of…"; "More about…"; "…revisited".
- Get straight to the point of what the article adds to the topic.

For reading more...

https://authorservices.taylorandfrancis.com/publishing-your-research/writing-your-paper/#

http://media.journals.elsevier.com/content/files/26275-11195249.pdf

https://www.sciencedirect.com/science/article/pii/S0264410X16311963?via%3Dihub

https://blog.degruyter.com/how-to-write-a-good-research-paper/

Please feel free to send e-mail about your questions!

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